

204.2(8) - Solid Refractive Index

SRM 1822a is intended for use in checking the accuracy of visible refractometers based on the immersion of small glass particles in oil. It consists of a soda-lime glass plate, approximately 25 mm x 25 mm x 3 mm, with ground faces. It is designed to be gradually consumed in use by breaking off pieces that are crushed into small particles for oil immersion refractometry.

Technical Contact: simon.kaplan@nist.gov

PLEASE NOTE: The tables are presented to facilitate comparisons among a family of materials to help customers select the best SRM for their needs. For specific values and uncertainties, the certificate is the only official source.

SRM	Description	Unit Size	Wavelength (nm)	<i>n</i> (at 22 °C)
1822a	Refractive Index Standard	1 glass plate(25x25x3mm)	480.1	1.526132 ± 1.6x10 ⁻⁵
			501.7	1.524468 ± 1.6x10 ⁻⁵
			508.7	1.523971 ± 1.6x10 ⁻⁵
			546.2	1.521629 ± 1.6x10 ⁻⁵
			587.7	1.519535 ± 1.6x10 ⁻⁵
			644.0	1.517277 ± 1.6x10 ⁻⁵